WQ 03/087572

PCT/DK03/00225

13

PATENT CLAIMS

- 1. A blade for use on a wind turbine, said blade being of the type that essentially comprises at least two separately manufactured, fibre-reinforced 5 laminated profiles (3,5) and at least one longitudinally extending beam part (2), characterin that the beam part (2) comprises at least one first part (4) and at least on second part (6), said first part (4) comprising at least one body 10 part (12) connected to at least one assembly face (10) and at least one abutment flange (14), said second part (6) comprising at least one body part (18) connected to at least one assembly face (16) and to at least one abutment flange (20), wherein the parts 15 (4.6) are adjusted by means for height adjustment (8) and connected to each other at the assembly faces (10, 16), and wherein the laminated profiles (3, 5) are assembled around the beam part (2) and glued against respective abutment flanges (14, 20).
- 2. A blade according to claim 1, c h a r a c t e r i z e d in that each of the parts (4, 6) comprise two parallel body parts (12a, 12b, 18a, 18b), said body parts being at their one end connected to an essentially transversally extending abutment 25 flange (14, 20) and at their other end connected to a transversally extending flange (22a, 22b, 24a, 24b), said flanges comprising assembly flaces (10a, 10b, 16a, 16b).
- 3. A blade according to claim 1 or 2, c h a r 30 a c t e r i z e d in that the means for height adjustment (8) comprises glue.
 - 4. A blade according to any one of claims 1-3, characterized in that the means for

WO 03/087572

PCT/DK03/00225

14

height adjustment (8) comprises screws, spacer elements, intermediate layers, or the like.

- 5: A blade according to any one of claims 1-4, characterized in that the beam part (2) 5 comprises at least one assembly panel (26) that overlaps the body parts (12,18) and are connected to both parts (4, 6).
- 6. A blade according to claim 4, c h a r a c t e r i z e d in that the assembly panel (26) is T- 10 shaped.
- 7. A method of assembling laminated profiles for a blade for a wind turbine, said blade being of the type that essentially comprises at least two separately manufactured, fibre-reinforced laminated 15 profiles (3, 5) and at least one longitudinally extending beam part (2), characterized in that the beam part (2) comprises at least a first part (4) and at least a second part (6), said first part (4) comprising at least one body part (12) con-20 nected to at least one assembly face (10) and at least one abutment flange (14), said second part (6) comprising at least one body part (18) connected to at least one assembly face (16) and to at least one abutment flange (20), wherein at least one of the 25 parts (4, 6) is manufactured to be undersized, and wherein the total height of the parts (4, 6) is adjusted, following which the parts (4, 6) are connected, and wherein the laminated profiles (3, 5) are assembled around the beam part (2) and glued to the 30 respective abutment flanges (14, 20).
 - 8. A method according to claim 7, characterized in that the parts (4, 6) are connected by gluing.

WO 03/087572

PCT/DK03/00225

15

- 9. A method according to claim 7 or 8, characterized in that the parts (4, 6) are laid in moulds with the abutment flanges (14, 20) facing the mould walls.
- characterized in that each of the parts (4, 6) comprises two parallel body parts (12a, 12b, 18a, 18b), said body parts being at their one end connected to an essentially transversally extending 10 abutment flange (14, 20) and at their other end connected to a transversally extending flange (22a, 22b, 24a, 24b), said flanges comprising assembly faces (10a, 10b, 16a, 16b), wherein, prior to assembly of the parts (4, 6), two assembly panels (26) are sembly of the parts, overlap the body parts (12a, 12b, 18a, 18b), said assembly panels (26) being connected to both parts (4, 6).